



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,236	11/13/2001	Jorg Werner	31833-176361	6404

26694 7590 08/20/2003

VENABLE, BAETJER, HOWARD AND CIVILETTI, LLP
P.O. BOX 34385
WASHINGTON, DC 20043-9998

EXAMINER

SANDERS, ALLYSON N

ART UNIT PAPER NUMBER

2876

DATE MAILED: 08/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

ATA

Office Action Summary

Application No.

09/987,236

Applicant(s)

WORNER ET AL.

Examiner

Allyson N Sanders

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 and 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

2. Claim 2 is objected to because of the following informalities:

Re claim 2, line 3: Replace, " $0.1 \leq B \leq 0.4\text{mm}$ " with $-0.1\text{mm} \leq B \leq 0.4\text{mm}$ --.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4, and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Detwiler et al (6,273,337) in view of Dolash et al (4,983,817).

Detwiler teaches the following in regards to claims 1, 2, 4, and 6-9.

Figure 1 shows a laser 20 and a lens 26 downstream from the laser. The figure also shows rotary spinner 22 and one or more pattern mirrors identified by the prefix 24 optically aligned with the spinner 22 in a conventional configuration which are used for guiding the transmitted light beams to the receiver 28. Lastly the figure shows a receiving lens 26, which is upstream from the receiver 28.

Figure 2 shows an electrical processor or decoder 32, which may also be mounted on the common PC board 30 and is operatively joined to the photodetector 28 for receiving electrical signals therefrom and decoding those signals for in turn decoding the barcode 12.

Standard size bar codes fall in the range of 0.1mm through 0.4mm. Figure 1 shows a bar code 12, which would fall into the above range.

Detwiler et al fails to specifically teach the light beams having a wavelength λ in a range of $350\text{nm} \leq \lambda \leq 450\text{nm}$.

It is well known and also specifically taught by Dolash et al that visible light has a wavelength that ranges from 400nm to 700nm.

In view of Dolash et al's teachings, it is obvious to one of ordinary skill in the art at the time the invention was made to use a light beam with a wavelength that ranges between 350nm and 450nm. When scanning a bar code one would prefer to see the beam in order to aim the beam towards the target. Using a wavelength in the above range would provide the user with a visible beam to use for scanning bar codes.

5. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Detwiler et al as modified by Dolash et al as applied to claim 1 above, and in further view of Dickson et al (6,193,157).

Detwiler et al and Dolash et al's teachings are discussed above.

Detwiler et al in combination with Dolash et al fails to specifically teach detecting marks up to a distance of 1.5m and having a predetermined depth of field.

Dickson et al teaches the following:

“Bar code readers are required to read bar codes on objects of a wide variety of sizes wherein the bar codes may be at varying distances from the scanner. This requires a wide range of depths of focus in order to read the bar code clearly and accurately over the entire distance in which they may be presented, typically as much as two meter.” (Col. 1, lines 12-17).

In view of Dickson et al's teaching, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to have the scanner scan up to a distance of 1.5 meters. Scanning an object from a distance of 1.5 meters (which requires a certain depth of field and a beam diameter within the depth of field) is a common function for scanners. One would be motivated to use a scanner, which is capable of scanning up to 1.5 meters away in order to allow for items wherein the barcodes are located at different distances from the scanning mechanism to be scanned. Having a greater scanning distance increases the functionality of the scanner by allowing the scanner to be used to scan a large variety of items containing barcodes.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Miyajima et al (6,311,894), Yomogida et al (2001/0042787), Kucharczyk (6,460,770), Detwiler (6,045,045), Zocca (6,049,406), Miksch et al (6,294,776), and (5,701,001).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Allyson Sanders* whose telephone number is (703) 305-5779. The examiner can normally be reached between the hours of 7:30AM to 4:00PM Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (703) 305-3503. The fax phone number for this Group is (703) 308-7722, (703) 308-7724, or (703) 308-7382.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [allyson.sanders@uspto.gov].

All Internet e-mail communications will be made of record in the application file.

PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published

Application/Control Number: 09/987,236

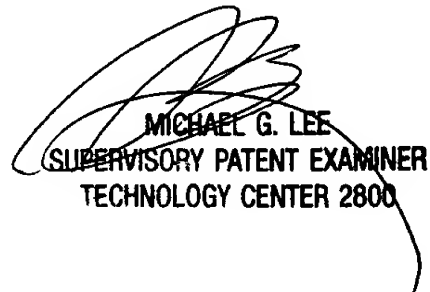
Page 6

Art Unit: 2876

in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG
89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Allyson Sanders
Patent Examiner
Art Unit 2876
July 30, 2003



MICHAEL G. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800